

The Core of Tacitness

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Abstract In a study of a quote from Tacitus, the purpose is to show how the reversibly synthesizing [AaO] mechanism of Perspective Text Analysis operates and can be used in the sequencing and description of an Ancient Latin paragraph. Sequencing implies the coding of strings at the edge where changes in resonating graphemes occur and become sensitive to the producer's timing. The employed coding is producing a geometric configuration which, moreover, is free from any semantic interpretation. Furthermore, the underlying AaO axiom provides the foundation for discerning the text producer's intention and orientation. Since the selected quote is original, it is free from any addition of other Latin words. Therefore, based on the application of energy landscapes, novel attractors can evolve and made manifest. Potential energy surfaces (PES) make the invested energy evident and the expended energy is described with free energy surfaces (FES) and is demonstrated in the form of fitness landscapes. The attractions in the landscapes are shown to carry state-dependent relations which are converging on an overall (A-O) symmetry. Finally, in employing the developed naming function, the transformative explanations of the most salient attractors are shown to result in *-Screeningø* the global terminus that is integrating the neighbouring *-Masteringø* into the perspective, which was originally sealed off by the quotation.

Texture may conceal the imprint of time but implies that a life-time of a single textural cell is expressible. Meta-physically conceived, it means that a cell or particle serves as a source or initial stage for subsequent development of a turnip of cells. *Each and every turnip, like every other organism carries time's imprint, which is expressed in a short developmental history* (McNamara, 1997, p. 7). From the initiation of the first particle, for example in the form of a virtual string, a baffling arrangement of other strings is evolving and cascading into an increasing particle-diversity. But very little is known about the actual mechanisms of how strings evolve and develop into a plan. In examining this special topic in the context of the reversibly synthesizing Agent-action-Objective [AaO] mechanism, it will become possible to reveal how a rich and fluid developmental process in the grapheme production is governing textual growth.

When an [AaO] ring is appearing as a flat molecular formation during the production of a textual flow, it can be shown that this unit carries a suitable notation for the primitive form of an emerging [AaO] system (B. Bierschenk, 2001). Hence, in the most primitive appearance of evolutionary changes, the concept of a flat molecular formation will be taken as manifestation of an emerging AaO unit. It follows, that analysis and synthesis must be built on the assumption that a particular style of thinking about a certain problem becomes evident in this process but is losing its meaning in the formation of abstraction.

In contrast, the underlying hypothesis of the present approach, is that structural relations, which form the basis in the developing text, are covered by the textual surface layout but become available through the sequencing and coding capacity of the [AaO] mechanism. Hence, in the moment when synthesis gets its manifestation in the form of an AaO-ring, text is shown to possess a *-Bauplanø* i.e., according to Karl Ernst von Baer the

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entirety of a plan (Raff, 1997, p. 7). Its structure is instrumental in linking all the syntactic information necessary for textual evolution. How the revealed mechanism provides the linkage between changes in the rates and timing in the developing strings and the core of the selected Latin quote will come within reach by showing how the *Shape of Text* evolves and is changing to variable degrees in order to yield evolutionary novelties. Based on the syntactic arrangement of the plan, changes in the fundamental relations of a developing text can be determined with a depiction of textual heterochrony.

Text and Context

Classical analyses are likewise departing from the layout of text but are always treating text as an object. This conduct fails to consider the engrained intentionality. Failure to consider this problem is arising because of the culturally defined objectivity hypotheses and consequently the dependency on greatly varying contextual conditions. Cultural influences are especially pronounced in cases where a wide time gap between writing and reading can be observed and where the style of writing is not fitting the classical models for analysing narratives (Brodsky, 1987). This circumstance invites the analyst to continuous clarifications which are undermining the desired objectivity. Against this situational reference, it is expected that the actual analyst is forced to transform his analytical awareness into subjectively coloured abstractions.

Concerning this age-old trend in text analysis, there is no easy way to get rid of all semantic confusions characterizing the study of historical works. Many students, interested in Rome's greatest historian, have taken a chronological, however opaque position, e.g., C. Kerrigan (2012) in his essay on *Virtue Lives Tacitus' Historical Vision*. Another author is A. Rahman (2006) who has written a paper on *Tacitus Use of Rumour: a Means of Realism or Distortion?* To Rahman, it appears to be obvious that Tacitus is conceived to be a master in narrating characters and environments. Both historians are of the opinion that Tacitus is a text producer, who managed to write with implicated meaning and to be simultaneously successful in mastering synthesis. That he as the text producer must be aware of his own position within his own analytical context seems to be obvious. Historians, e.g., A. J. Woodman (1988), by their psychologizing and suggestions about Tacitus' way of writing give highly subjective accounts and discuss his view on history mainly by examples. Finally, Rahman considers the history in Tacitus' writings to be intended to provide a form of moral guidance, which appears to be based on a resolutely didactic view.

Exploiting the didactic view builds on the premise that Tacitus tried to counteract an expected final disintegration of Rome's entire civilisation. In a modern view, this however would require that Rome's citizens would develop individualized concepts. Such concepts would appear to be basic for the citizen's orientation and identification of what is essential to his survival in the given civilization. The following statement, to be found in Kerrigan (2012, p. 1), is a highly significant case:

*praecipuum munus annalium reor ne uirtutes sileantur utque prauis
dictis factisque ex posteritate et infamia metus sit (3.65.1)*

This statement has been extracted from the *praecipuum munus annalium* at Annals 3. 65 and constitutes the basic condition, communicated in Kerrigan's essay. According to his view on Roman history, its civilisation grew continuously, but was sloping deeply into misery. That the narratives of Tacitus must contain this kind of contextual information together with a certain degree of self-indication is the usual way of interpreting his writing in a personal manner about characters and environments.

In cases where public moral and norms no longer is a sufficient condition for guidance, needed transformations would have to be considered to have the capacity to generate definite advantages. However, suggested concepts are not only dependent on the development during an individual life time but also on growth which is dependent on global timing. When the achieved structural relations develop at the edge of individual and societal configurations, concepts need to have the capacity to advance the member of a civilisation towards greater integration.

The emphasis in the formulation (3.65.1) is on synthesis and the main hypothesis is that Tacitus here shows his ability to synthesize his thoughts into a pronounced expression. This circumstance relates to the prerequisite to discover the structure underlying conceptual information and to identify environmental constraints.

The lowest common denominator of self is the (AaO) relationship which constitutes the axiomatic premise for the Agent (A), the action (a) and the Objective (O) of the action.

Strings of Graphemes

To rephrase the noted commonality between a text and its producer: an [AaO] analysis is sequencing strings of graphemes, which means the determination of the primary level of text processing. This newly developed ability to study strings through sequencing provides an entirely new set of data which, furthermore, is a necessary condition for a structural approach to the componential (A, O) properties. As a result, sequencing implies a symbolic depiction which succinctly summarizes much of the atomic string level of the [A= , O= , Ø] components.

Since the symbolic depiction of strings requires that every functional clause, embraced by clause marker (*), in its reproduction must consist of the same [AaO] information, tracing the patterns of the () as well as the () component is contributing to the formation of borders. Furthermore, the grapheme-bonding capacity of the [AaO] machinery implies that the mechanism always is establishing the ~~correct~~ entanglement of the components (B. Bierschenk, 1984, 2001). Consequently, in a given textual environment, permissible neighbourhood can be established. Finally, the mechanism's geometric capacity is used, with the purpose to demonstrate how phase dependent textual movement patterns become modulated and manifest through the computation of radians.

The Alpha and Beta Strands

The symbolic description of sequenced string allows for the identification and extraction of the alpha () and beta () strands which are connecting the [AaO] units. In evolutionary language terms the strands relate to string composites which will be treated as the units of evolution. However, the role of variability in the growth of individual string composites implies that uniqueness in the orientation of the individual composite must simultaneously be contrasted with its essential properties. Essentiality relates to the pureness of a composite, i.e., its share in the *red thread* of a text composition. When composites denote with each other integrated strings and compounds, evolutionary changes can be observed in the development of the strands. This kind of developmental progression generates layered variables. Thus, variability and variety of strings and string-grapheme compounds become identical with grapheme sequences, characterising the surface properties of the text in Table 1. For a detailed understanding of Table 1, complementary information may be found in the Tutorials to Perspective Text Analysis (e.g., I. Bierschenk & B. Bierschenk, 2011).

Table 1*String sequencing of the Tacitus citation (3.65.1)*

<i>Interval</i>	<i>Code</i>	<i>String</i>	<i>Count</i>	<i>Radian</i>	<i>Base</i>	<i>Magnitude¹</i>
1	0.1	*				
	30	praecipuum	10	0.774		
	30	munus	5	0.5805		
	30	annalium	8	0.6966		
				2.0511	3.87	₁ =5.9211
	40	reor	4	0.4396		
	50	ne	2	0.3768		
	50	uirtutes	8	0.5652		
				1.3816	3.14	₁ =4.5216
2	0.1	*				
	30	Ø			5.5	₂ =3.066669
	40	sileantur	9	1.4915		
	50	Ø				
	0.1	utque	5	1.1775		
	9050	prauis	6	1.256		
	9050	dictis	6	1.413		
	9050	factisque	8	1.413		
				6.751	0.785	₂ =7.536
	60	ex	2	0.4644		
	60	posteritate	10	0.774		
				1.2384	3.87	₃ =5.1471
	50	et	2	0.3768		
	50	infamia	7	0.5338		
	50	metus	5	0.471		
				1.3816	3.14	₄ =4.5216
3	0.1	*				
	30	Ø			5.5	₃ =0.721461
	40	sit	3	0.4082		
	50	Ø=[Y]				
	0	.		0.3454		
	0.1	*		0.7536		₅ =0.7536

¹ Agent variable for beta (3) and beta (4) are duplications of alpha variable (1)

Introducing novel strings in the production of a particular expression concerns the relation between individual strings and text. Thus, individual strings constitute the elements in text production, but individual strings do not develop evolutionary. They cannot grow when they appear as graphemes, but propagate when they appear as placeholders (Ø). A formulation, which contains (Ø) allows the coupling of individual string movements on the micro-level with the trends in a formulation on the macro-level.

In the first place, any expansion of the reference variable for (Ø) is coupled with a growth in productivity and consequently diversification. Secondly, the displacement dynamics, marked with (S), is generating the foundation for a re-concentration of information, i.e., the formation of redundancies, which may be influencing new fields in the production process. At this stage of development, the differentiability of *sheets of texture* is made dependent on intrinsic spacing and timing. The resulting time-dependent surface layout is reproduced in Figure 1.

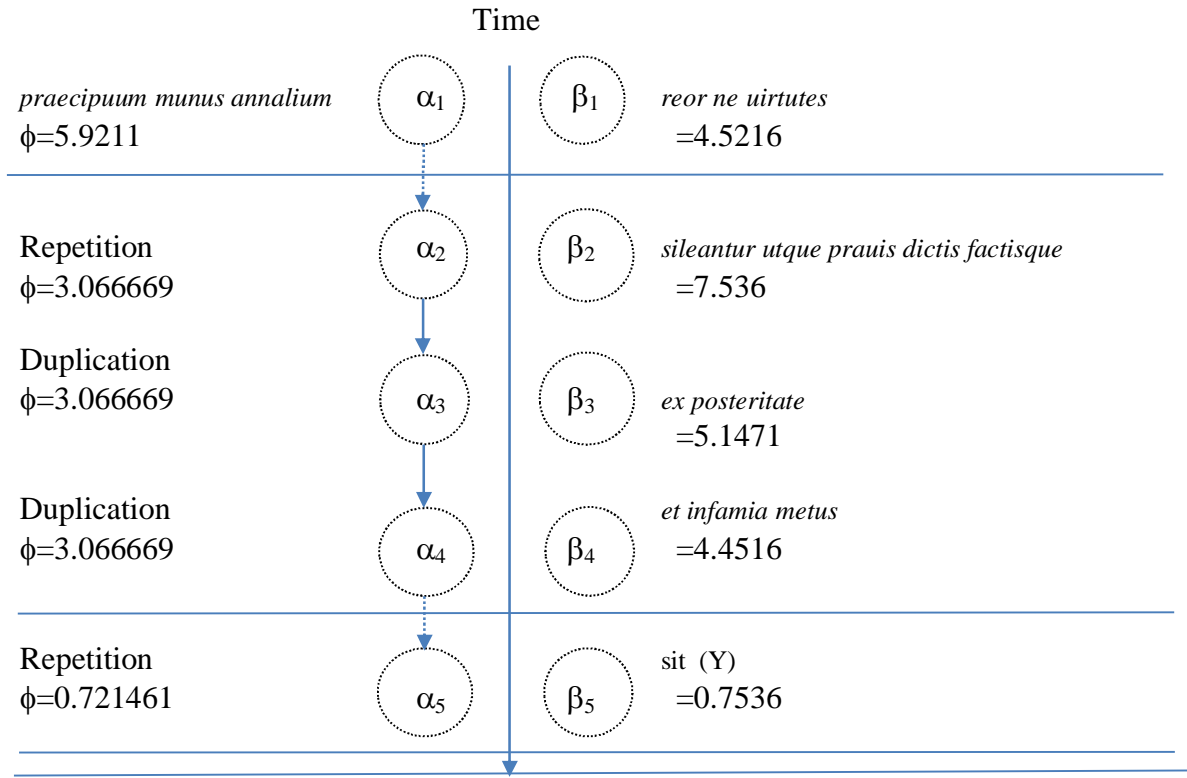


Figure 1 Coding protocol of the Tacitus citation (3.65.1)

The hypothesis is that a fluid form of indexing the properties of rotational dynamics provides an exact characterisation of a transition, resulting from the exact reproduction of the identified control parameters. Thus, the kinetics of string production is based on the measures on produced agents and objectives respectively. Occurring in the sections are the radians which give expression to the flow dynamics,.

Measuring in radians implies that the co-ordinated displacement of strings can be identified with a dynamical system. It follows that exactness in textual movement co-ordination is dependent on rotational precision. This condition is a prerequisite for proper adaptation. As is shown in the Figure 1, differences in adaptation have produced variations in the expression of Agent and Objective. What is particular in the A-component can be extracted easily. The special character of an in-depth perspectivation appears in the overshadowing of (α_1), which is achieved by (α_2), (α_3), (α_4) and (α_5). This is a particular kind of fading and appears mainly in the second section.

Since the material (α_1) is first copied into (α_2) and thereafter duplicated (α_3) through the procedure of re-iterating a copy, it can be concluded that the process of copying at each re-iteration step leaves behind a mark of itself (α), which is a kind of self-indication that effects the flow as well as the overall dynamics in the formation of the potential energy surface of the Agent contour. This means that the string has changed its place but not its position. Thus, the shadow of the string looks like the original one and therefore is considered the same. In general, a string can be copied (m) times. But in practice, the number of repetitions is usually small (1 to 3 times).

Besides marking a change in attitude in the mathematical sense of the term, something different happens in the applied function ($[\phi_0=(1/2A+1/2O)]$). The square root of the rotation around the entire A- and O-spheres, i.e., the A-circle and the O-circle, respectively, has been included in the principal part of the S-function $=[\Phi-(\sqrt{\phi}+\sqrt{\theta}+i-k)]$. It concerns the direction

of focus. The changes in the α -Strand describe not only a change in angular articulation, but also a rotation at a particular point of observation. The process is illustrated in Figure 2, and this example makes apparent that one and the same agent variable continues in holding the line in the angular articulation, which is a kind of repeated self-indication.

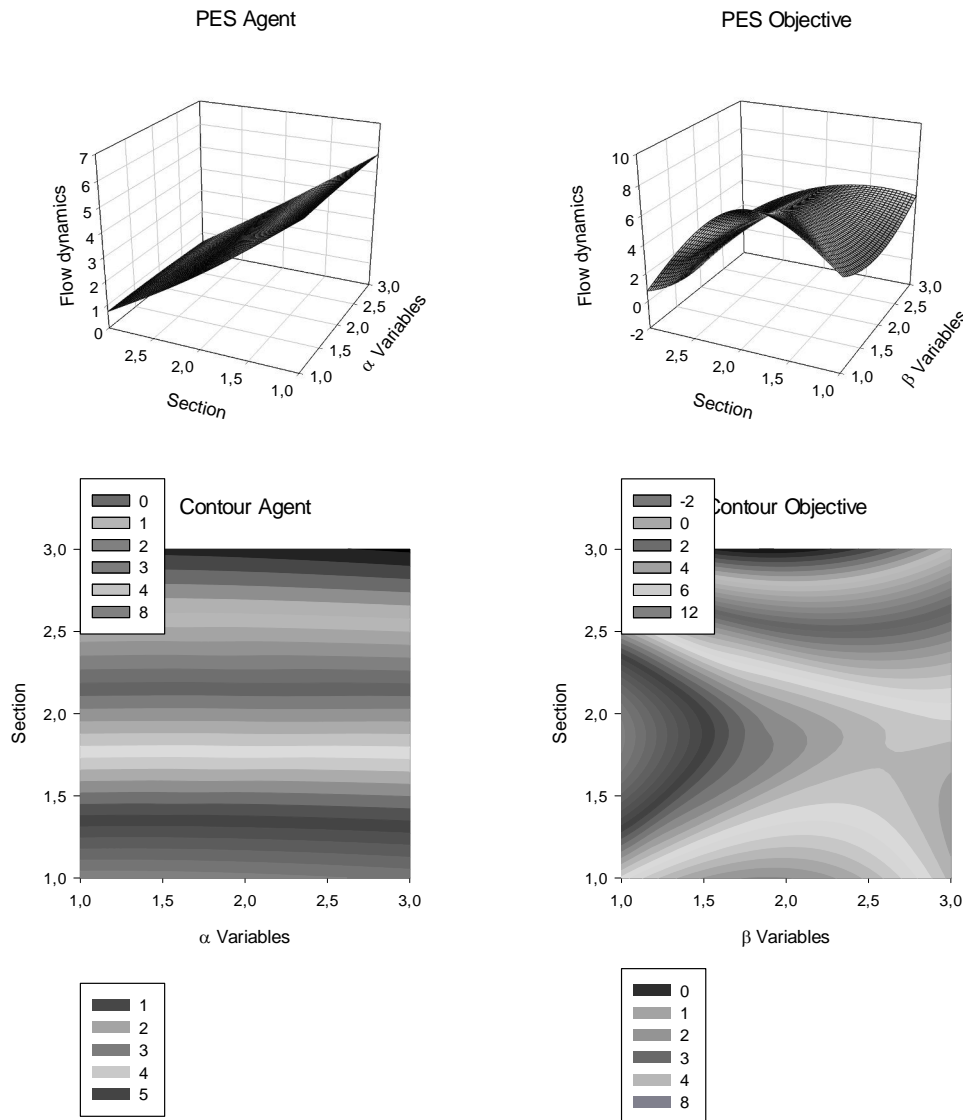


Figure 2 *Resonance in the alpha and beta strands*

As more edges become involved in such a series, the dimension grows in its entwining and thus, is fading away deeper and deeper into the on-going conceptualisation. The corresponding graph illustrates the character of the evolving shape which obviously is not diverging much from the true line.

A helical silhouette appears in the Objective, where (α_1) in the first interval is carrying only material strings, which means that the equilibrium of the first clause becomes established through the operation of adding the radians. The second interval begins with a rich number of strings which makes their carriage by (α_2) heavier and significantly different from the loads

carried by (3) and (4). The demonstrated difference concerns a critical change in rotation which is resulting in an obvious twist which is causing a nonlinear path. Thus, whenever the depicted process in the unfolded Objective is advancing from one state to the next, the established distance is a measure on the degree of *directness*, which is driving the development of the gradient through both intervals. However, indirectness occurs in the third interval due to the fact that the dummy is supplemented with [Y-Variable], i.e. something not known.

By means of the transparency between Table 1 and Figure 1 it is observable that variation in the α - and β -strands have generated variations in the expression of the depth relations in the quote. This means that the flow dynamics is reflecting differences in the conserved kinetic potentials as well as in the redundancies of the involutes. What kind of conserved energy has been generated has been shown to depend on the kind of interplay between material and immaterial strings. Since the steep in a graph corresponds operationally to the degree of realised string articulation, depth in articulation reflects the degree of sensibility to indirectness in the formulation.

Alpha and Beta Strands

To be able to analyse sequenced strings is a required precondition if one would like to reflect synthesis and to reconstruct corresponding work () spaces. In what way the magnitudes of Table 1 define growth in an evolutionary sense will be shown to depend on the formation of topological singularities. Since any singularity exists independent of the kind or degree of deformation on a developing path, a singularity marks the presence of a topological invariant, i.e., a state attractor. Since the path in a work space is an indivisible unity, its holonomic form is expressed in evolving ring structure.

To rule a coordinated grid on the work space is a convenient device for visualising irreversible time and convolutions of composites. The size of a corresponding grid can be determined on the basis of the following observation: The representation of one state attractor (T_j) in the work space () requires four coordinates. The number of singularities (T_k) is one less the number of point attractors (p_i), characterising the terminal states of corresponding grid. The needed system can be approximated: $[(4 \cdot T_k) - 4 = \text{Cells of attraction} - 1]$. Here, the subtraction relates to the necessary number of cells (degrees of freedom) in order to form the first state attractor.

This relationship builds on two stress functions, namely (X), which has been shown to manifest strain-stress and (Y), which represents shear-stress, meanwhile the (Z) is now reflecting the fusion dynamics of the system. It is worth noting that the terminal states of a grid are representing the point attractors (p_1, p_2) as well as a new kind of Dummy (D_i), related to the binary groups (G^*) of Connes (1994, p. 176). Every discrete point attractor or (D_i) is partaking in the formation of a binary group. With the α - and β -Strands as intermediaries, folding through transformations is thereby supporting the development of micro-structures.

To determine the significance of a micro-structure requires that basic sub-structures are remoulded during the formation of the free energy landscapes, shown below in Figure 3. It follows that the evolution of a convoluted space requires a novel way of varying and integrating string-magnitudes in order to fit a particular pace in the fusion.

Geological Stratifications and Geographical Proliferations

The basis for a geological stratification is summarized in the Contour graphs of Figure 3. The fusion dynamics is controlling the distance between the strata. Pronounced fusions are the result of shear activities. The position of a particular crater appears to be dependent partly on the energy fused during the process of building up a stratum, partly on the causal branching in the entire location. The largest craters in both graphs have distinct boundaries

but they are also surrounded by less distinct areas. Thus, the generation and behaviour in both the individual stratum and within greater areas of strata define the craters of the Objective and the Agent, respectively.

A minor crater appears as foot barrier in the Agent graph which is adjacent to the deeper region. Thus, the *stress of shearing* is building up a crater through foliation and is reaching a level that exceeds the *stress of the strain* at the threshold. The accumulated potential energy of the released strain has been illustrated in Figure 1. Relative to its flow dynamics, strain is accommodated and fused into the stratification of Figure 3.

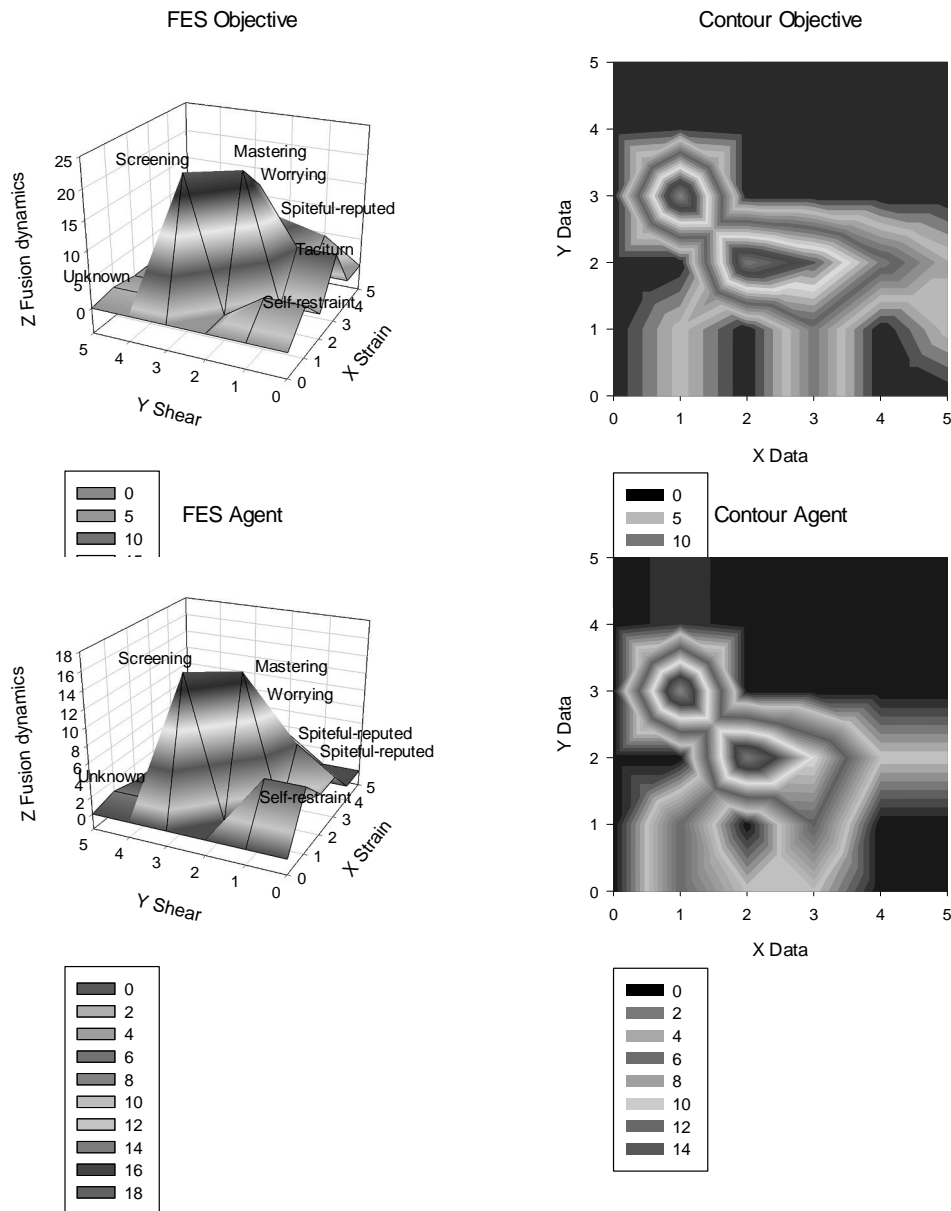


Figure 3 *Named folds and stratified kinematic energy*

In comparing the evolving FES landscapes with the Contour graphs, it can be stated that there is, in the first place, nothing but abstract geometric spaces, made up by formal patterns of -Folds, -Valleys and -Craters. Complementary to the patterns of strata in the Contour

graphs, the FES landscapes have been produced with the purpose to propose a different perspective on accumulated and conserved thermodynamic energy.

Appearing in the stratifications of the Contour graphs is a particular firmness. For example, if the stratum on the plane is oriented vertically, this implies that the stratum is producing a sheer. If however the main direction is horizontal, this means that a transformational bend has occurred. In contrast, when neither a vertical nor a horizontal sliding is detectable, stratification appears to be the result of a *homorhesic* path which is marked by an insignificant sliding.

When sufficiently integrated micro-structures have appeared, the fusion dynamics, in relation to the orientation in sliding, is marking larger sliding which links them to the structure of a greater area. The direction and magnitude in the creases and separation can be measured and used to establish the core of an abstract geometric formation.

Another presentation of the abstract configurations of the folds and their borders is given in the FES landscapes. Thus, transiting through their spaces is strictly controlled by the thermodynamic properties of its point and state attractors. For making an abstract space comprehensible, it is necessary to go back to the texture of the quote, because this is the place where the developing structures are anchored.

Naming the Objective Path

To get some feeling for the way in which the naming operates, the path will be illustrated and discussed on the basis of Connesø (1994) fusion Δ -operator (B. Bierschenk, 2011). The strain-stress function means that binary (G^*) groups are produced which have both accumulative and transformative properties.

Table 2

Transformations in the Objective

G*	Magnitude	Latin	English
D	0		
1	4.5216	Reor ne uirtutes	do not think of power
T1	4.5216	Abstinencia	Self-restraint
D	0		
2	7.536	Sileantur (utque prauis dictis factisque)	and as mute on
T2	7.536	Taciturnus	Taciturn
3	5.1471	Ex posteritate	of posterity
4	4.5216	Et infamia metus	Bad words and deeds
T3	9.6300	Perverse-reputati	Spiteful-reputed
<i>T2</i>	<i>7.536</i>	<i>Taciturnus</i>	<i>Taciturn</i>
<i>T3</i>	<i>9.6300</i>	<i>Perverse-reputati</i>	<i>Spiteful-reputed</i>
T4	17.166	Exercitus	Worrying
<i>T1</i>	<i>4.5216</i>	<i>Abstinencia</i>	<i>Self-restraint</i>
<i>T4</i>	<i>17.166</i>	<i>Exercitus</i>	<i>Worrying</i>
T5	21.6876	Domitio	Mastering
D	0		
6	0.7536	Sit (Y)	Let (Y)
T6	0.7536	Ignotis	Unknown
<i>T5</i>	<i>21.6876</i>	<i>Domitio</i>	<i>Mastering</i>
<i>T6</i>	<i>0.7536</i>	<i>Ignotis</i>	<i>Be unknown</i>
T7	22.4412	Conditus	Screening

Thus formed under strain and with small-scale deviations, micro-structures are the outcome of the (G*) groupings which have released stress under the condition of high strain. When the strain rate is too great, a *hysteresis* appears in the configuration of the binary groups and transforms its boundaries. By generating pairs of values, speed in escapement is enveloped by operations that are closing all open sets. No matter what the value of an initial variable is, closing is realized by inserting a zero value (D) in the upper left cell of the instrumental four-fold tables (B. Bierschenk, 2011).

In treating the micro-structures as folds in the energy landscape of the Objective means that they resonate with their own thematic state attractors. Besides their capacity to work towards unification, they converge on the global or final state attractor. The attractors have allowed the processing of sophisticated differences and the termini are emerging as the result of a particular stress orientation which is converging on the state attractor, named *-Screeningø*.

The æcologicalø meaning of the expression seems to imply a focus on the significance of the conceived sentiment. Invariant in the process is an awareness of actuality and the way in which this global state attractor has been influenced by the behaviour of the other high ranking attractor, namely *-Masteringø*. In a sense, mastering is dependent on how the relations in Table 2 have been transformed since the act of mastering requires some analytical rigour. The relational closeness of this terminus to *-Screeningø* means naming the centrality in the Orientation dimension.

The third invariant carries the terminus *-Worryingø* which is pointing towards the important of being able to anticipate potential threats and to counteract threats by means of precautions. In prospecting potential risks due to contextual changes, the state attractor *-Spiteful reputedø* can be observed as the outcome of an angular articulation, which appears to be anchored in a self-referential conduct.

Prospected is a malicious ill will by others and their desire to hurt publicly by spite. Thus a vindictive person will look for occasions for resentment. Furthermore, it is pointing towards a functional relation between the position formed and the meaning-generating context which gives rise to Ancient consciousness (B. Bierschenk, 2012), that in its entirety is difficult to capture through the classical text analytical approaches.

Compared with the Agent space, an invariant that is emerging only in the Objective space is named *-Taciturnø*. Causally restricted to the dimension of Orientation, it implies thematically a cool attitude. Rather than focusing on a regime or a set of specific traits, this terminus is addressing stern strategies instead of discussing disposition factors.

The final two attractors to be discussed are *-Self-restraintø* and *-Unknownø* which are to be found at the base line and are pointing towards self-sensitivity and farsightedness. In leaving an objective unknown it invites to a progression towards the top of the mountain where the solution of its processing can be found. In Figure 3 above, the *-Unknownø* represents a minimum of free energy and any step from this base line is uphill and implies increasing transformations towards the resolution of the Objective.

Naming the Intention Path

If the naming of the Orientation path has been successful, a further routine can be initiated. This routine concerns the α -variables of the A-component and requires that a terminus is extracted for the proper description of the state attractors of the landscape of the Agent component as presented in Figure 3. The procedures of Table 3 may contain a helpful illustration. Extraction begins with a search for the starting variable, which is a dummy (D). Following the path to (α_2) leads to the state attractor (T_{A1}). In order to find the corresponding path in the Orientation space, the routine is switching to (β_1) and follow the path to (D).

Table 3*Extraction of termini from O-component*

<i>A-component</i>	<i>O-component</i>	<i>Latin</i>	<i>English</i>	<i>Fusion</i>
<i>Pendulum</i>	<i>Destination</i>	<i>Extract</i>	<i>Extract</i>	<i>Value</i>
$T_{A1}: D \rightarrow \alpha_1$	T_{O1}	Abstinentia	Self-restraint	5.921
$T_{A2}: \alpha_2 \rightarrow \alpha_3$	T_{O3}	Perverse-reputati	Spiteful reputed	6.13338
$T_{A3}: D \rightarrow \alpha_4$	T_{O3}	Perverse-reputati	Spiteful reputed	3.066669
$T_{A4}: T_{A3} \rightarrow T_{A2}$	T_{O4}	Exercitus	Worrying	9.200049
$T_{A5}: T_{A4} \rightarrow T_{A1}$	T_{O5}	Domitio	Mastering	15.121049
$T_{A6}: D \rightarrow \alpha_5$	T_{O6}	Ignotis	Be unknown	0.721461
$T_{A7}: T_{A6} \rightarrow T_{A5}$	T_{O7}	Conditus	Screening	15.84251

Immediately before (D), appears the terminus of (T_{O1}) which is the aspired point of destination, whose name is *Abstinentia* (Self-restraint). Thus, this term is extracted and used as the proper descriptor. On the basis of the terminal states of the initialising A-configuration, the cycle of extraction is swinging the pendulum, which is moving through the corresponding configuration of the β -space. When the pendulum is reaching the highest point of the resulting curve, a location is encountered, which contains the specifying name of the singularity. Thereby, cyclic swinging through the configuration is extracting the descriptors, which are specifying the meaning of the resulting fusion. The continuously bending curve, which is characterising the evolving path of the intention dynamics, gives expression to an ordered sequence of positions that mirror with one exception the specification order of the β -configuration. Through the cyclic extraction of the descriptors it is made evident that the clockwork of extraction is highlighting the looping phenomenon which is emerging in the text producer's argumentation. Looping is an intentional phenomenon, which is producing the reappearance of descriptors within and between substructures. For example the terminus *Spiteful reputed* is reappearing in the fourth substructure. Thus, a single descriptor can follow itself and reappear at the same topographical level. In this sense the behaviour is materialising a halo ring.

Compared to the Objective, the most striking effect of the topology-changing transitions points to the impact of the reappearing descriptors, and to the effect they have manifested concerning non-shifting focus in the dimension of intention. Remoulding recurrent singularities is a sign of strength in the structural adaptability and is manifesting a certain degree of structural stability in the development of both theme and motif.

Discussion

The basic property of the reversibly synthesizing [AaO] mechanism concerns computation and abstraction of the novelties in the Agent and Objective. To paraphrase Mackenzie (1998), the validity of their computational resolution comes from the processing itself but requires always the presence of a structured textual context. Since the manner of production of the AaO mechanism has been formulated within the framework of rotational dynamics, it has to be conceived of as an abstract machine. The only important thing is that the mechanism shows a machine-like behaviour, conforming to natural law. Because of the closure of the operating functional clause, the emerging resolutions to the involved language

equations have produced the equilibrations which have led to emerging symmetries and finally to qualitative statements, i.e., the formed *Shapes of Text*∅.

With the realisation of the termini *Screening*∅ and *Mastering*∅ for the description of the corresponding state spaces, the energy fusion has been shown to work towards the concentration of information where the focus is on the way in which the names have become determined by the structure of the surrounding textual context. Thus, the maintenance of its non-equilibrium properties through symmetry-breaking operations allows the [AaO] system to reflect its own internal dynamics together with the structure of the context. In conclusion, context-embedded structures are producing the textual segments, which have been channelled through the flow-fields. As a logical consequence the function of the flow-fields is independent of whether one conceives the mechanism as ideal or material or whether one assumes that its routines operate within Euclidean or non-Euclidean space. Since the produced names are the consequences of processing, the resolutions of the equations of the evolutionary text processing, have with respect to emerging information structures, important theoretical implications.

From a geometrical point of view, this means that text has to be conceived of as a set of specifying relations. This implies that more than one measured position is required in order to specify the location of a text as a whole in a given space. Consequently, the location of a text can be validated with the set of A- and O-positions. A grouping, based on measures of distance between them has been shown to determine the relation between subspaces. Formulating space and time by means of a fusion algorithm has empirical content, because it regards the measured relation as relation between mutually dependent properties. It follows that geometric properties of this kind have made it possible to determine the basis for the relation of the sub-systems with testable consequences.

Validity and Verification

Whenever language specific equations have been resolved, evolutionary properties (q) are observable as novelties. Applying the binary fusion function in this process implies a technical operation on the strings of a text. In representing strings of graphemes with a pair of radians, where every resonating string is twinned with an indistinguishable non-resonating string, i.e. the immaterial string (∅), this string can be represented by an Alter-ego which takes zero as its value. It follows that progressive processing of the A- and O-components has been definable on the basis of binary matrices and on the folding of the trace of the A-matrix as well as the trace of the O-matrix. The folding makes the coupling process (C) manifest and gives the outcome its direct physical meaning. It has been shown that direction and the rotational angle carry ecological validity. Furthermore, the coupling has produced coherence in the text producer's self-view, which is the crucial new dimension. It is allowing a determination of the depth in self-reference and to show that this kind of self-reference is dependent on how basic sub-structures are remoulded during the formation of the naming path.

The emphasis in the present article has been put on understanding Latin language without the interference of a translator. As the configurations of Figure 3 indicate, Tacitus wrote with the high aim of mastering his focus on screening people and events by maintaining a cool attitude and a certain distance in his delineation of appeal. Tacitus himself provides the exact example due to his cool attitude and stern strategy.

References

- Bierschenk, B. (1984). Steering mechanisms for knowability. *Cognitive Science Research*, 1. Lund: Lund University.
- Bierschenk, B. (2001). Geometric foundation and quantification of the flow in a verbal expression. *Cognitive Science Research*, 81. Copenhagen University & Lund University.
- Bierschenk, B. (2011). Functional text geometry: The essentials of Perspective Text Analysis. *Cognitive Science Research*, 101. Copenhagen University & Lund University.
- Bierschenk, B. (Ed.). (2012). Consciousness in Historical Time: Tacitus on the Suiones. *Cognitive Science Research*, 103. Copenhagen University & Lund University.
- Bierschenk, I., & Bierschenk, B. (2011). Perspective Text Analysis: Tutorial to Vertex. *Cognitive Science Research*, 100. Copenhagen University & Lund University.
- Brodsky, C. (1987). *The imposition of form. Studies in narrative representation and knowledge*. Princeton, NJ: Princeton University Press.
- Connes, A. (1994). *Noncommutative geometry*. New York: Academic Press.
- Kerrigan, Ch. (2012, August). "Virtue Lives": Tacitus' Historical Vision. An essay for the 2012 Undergraduate Awards Competition. Read on Scribd
- Mackenzie, D. (1998). The proof is in the packing. *American Scientist*, 86 (6), 524-525.
- McNamara, K. J. (1997). *Shapes of time. The evolution of growth and development*. Baltimore: The Johns Hopkins University Press.
- Raff, R. A. (1996). *The shape of life. Genes, development, and the evolution of animal form*. Chicago: The University of Chicago Press.
- Rahman, A. (2006, August). Tacitus' Use of Rumour: a Means of Realism or Distortion? Posted in Academic Matters, Roman Papers.
- Woodman, A. J., & Martin, R. H. (Eds.). (1996). *The Annals of Tacitus. Book 3*. Cambridge: Cambridge University Press.

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